

ABSTRACT OF THE DISCLOSURE

The invention includes mainly a machine base, a carrier, a sliding control mechanism, a latch mechanism, a horizontal shifting mechanism, and a lifting mechanism. The FOUP (front-opening unified pod) is put on the carrier and latched by a locking plate of the latch at an accurate position. The carrier moves forwardly to tightly engage the FOUP to a gate on an access at a backboard of the machine base, and thus a cover of the FOUP is opened by a headstock gear at the back of the gate then carried backwardly away from the FOUP by the horizontal shifting mechanism and lowered by the lifting mechanism. Reversely, the cover is closed on the FOUP. As such, the cover is loaded and opened automatically, as well as in closed, which can be a part of automation and prevents wafers from contamination.